REFUTING THE MATHEMATICAL MIRACLE OF THE QURAN

The, "mathematical miracle of the Quran," is often pointed to as one of the inimitable features of the Quran. Basically, the Quran was fed into a computer, which analysed it every-which-way and it was found that the number 19 (of all numbers) appeared many times, in quite startling ways. This argument has gained widespread acceptance, amongst the average Muslim, although I cannot think that any intelligent Muslim would give this argument serious consideration. Even so, this is an excellent example of the general lack of critical thinking on the part of the average Muslim person, who is all too ready to accept an argument, which he/she does not fully understand. I can say, with confidence, that the average Muslim person does not understand the argument, first, because of the absurdity of the argument (which we will go on to demonstrate), second, because the counts and calculations involved in the miracle are too intricate and convoluted for any person to verify, and, third, because the full facts of the argument are nowhere to be found; that is, there are many statements of amazing occurrence of 19 in the Quran, however, there is no complete, consistent statement of the *methods* used in the investigation and of the complete, consistent *findings* of the investigation (the full meaning of these things we will discover in the course of the essay).

There are three broad problems with the mathematical miracle, and these are also problems for all mathematical superstitions in general. Mathematics has always provided fertile soil for superstitions and general insanity (the obsessive compulsive and the paranoid schizophrenic both have an affinity for numbers). All superstitions are caused by our pattern-seeking inclinations and numbers provide an infinite set of data for the pattern-seeker to get lost in. Numerology is the name given to the belief that numbers influence human destiny or that numbers are imbued with special powers and it is a particularly interesting, stubborn superstition. Jim Carey recently played a number-obsessed madman in the psychological thriller, "43", which plays on typical numerological coincidences. Thus, the following three general problems apply to *all* number superstitions, including the mathematical miracle of the Quran.

The first problem is *the sheer amount of data available*. Anything can be counted, and there are a potentially infinite number of things to count. The stars, for example, provide a pregnant data source. You might count stars of a certain stage in their life cycle: red giant, to black hole. You might count stars exhibiting certain orbits, such as binary stars. You might count

stars orbited by certain types of planets. You might count stars of a certain size or colour or heat. You might count stars per galaxy or constellation, etc. Similarly, with the Quran, there are tens of thousands of countable elements. You might count the recurrence of a letter or a word or a phrase. One might count the instances of names, or numbers, or places in the text. One might count verse numbers or sura numbers, or the number of verses in each surah, etc. One might assign each letter with a number – a common numerological practice – which will open a whole new can of worms. You might count one of these elements in one surah or two surahs or any combination of surahs, surahs issued at Mecca or Medina, or any other division we can think of. The possibilities are endless. These variations alone provide (literally) *tens of thousands* of numbers. Thus, if you were looking – actively searching – for a certain number, or just any number, you are bound to find it, more than once, more than you would expect, and in more ways that you would expect.

(Notice, that as the number of counted numbers *increases* the likelihood of finding nineteen, from some combination of counted numbers, also increases. Given one number, the likelihood of finding nineteen is 1/19. But given two numbers (provided you can choose to add or not add the numbers) the odds are slightly better. Given five numbers, for example, the odds of finding a multiple of nineteen from some combination of numbers is over 80%. Here we have literally tens of thousands of potential counted numbers to work with. In ten thousand counted numbers, at odds of 1/19, we can expect to find roughly 500 multiples of nineteen as is. If we then factor in the fact that we can combine more than one number to find a multiple of nineteen, the likelihood of finding a multiple of 19 increases dramatically.)

The second problem is the *sheer number of ways to manipulate the data* (I do not use the word manipulate with any negative intent). For instance, when looking for a certain number, you might consider adding or subtracting the counted numbers, to obtain the desired number, or multiplying or dividing counted numbers. (The pattern-seeker is especially pleased when he finds the multiple of a certain number, particularly the square of the number.) However, numerology frequently employs more unconventional operations, such as adding each digit in a number together, as many times as desired, or in adding just a single digit to the remaining number, or just lining a few numbers up to form a single number. (Notice that none of these things are particularly mathematical at all.) Thus, take a fertile data source, apply whatever filters you desire, and you are bound to find (literally) millions of new numbers, and naturally, you will find *your* number in even more ways than before.

(Additionally, if the odds of a combination of five numbers adding up to a multiple of nineteen are eighty percent, then if we allow for the various forms of manipulation mentioned above, we are looking at even greater odds of finding nineteen. Naturally, many of these superabundant occurrences of the number 19 (and multiples thereof) will be effectively meaningless and unconvincing, yet given hundreds of thousands of variations, some coincidences are likely to be more significant than others (on average the more variations, the more coincidences) and the pattern-seeker focusses exclusively on these coincidences.)

The third problem, which is a result of the first two (the sheer number of things to count, and the number of ways to manipulate the data) is a complete *lack of consistency and perspective*. The pattern-seeker *never* counts the amount of times that he *does not* find his number (which is 99% of the time) but focusses only on the *one* time that he does find it; he/she has a completely imbalanced/biased perspective. The pattern-seeker, also, does not use any consistent method, but will employ *any* method as long as it gets the desired result. Similarly, with regards to the mathematical miracle of the Quran, you will observe: first, that there is no consistent method for arriving at the number nineteen; often the number is reached through a different, sometimes unorthodox, calculation. No consistent method means that finding 19, in most cases, has no especial significance. Second, there is no mention of the significance of *other* numbers (other than 19, that is). This leads to a complete lack of *perspective*. For instance, if the number 17 appeared almost as many times as 19, then we would seriously question the importance of 19. It is a logical fact that if you analyse any book one number will occur more frequently, depending on which method you use. Is 19 just the number at the top of the pile? (The idea that it is *not* at the top of the pile is also not particularly appealing to the Muslim person.) Thirdly, as in the case of the pattern-seeker, there is no mention of how often the number 19 *did not* appear: how many calculations were, "dead ends," so to speak? If we knew this, we might be able to establish the *true* significance of the number 19.

Thus, we conclude the three general points, which apply to all mathematical superstitions, but which we have applied to the mathematical miracle of the Quran. We now consider certain additional, more specific considerations that apply only to the mathematical miracle of the Quran.

First, interestingly – as Muslims themselves point out – the entire mathematical miracle can be upset by the addition or subtraction of a single letter or word. This – to the Muslim – is a proof of the divine miracle of the Quran, which is perfect to the very last letter. However, anyone who is familiar with the history of the compilation of the Quran, will know that the

current version of the Quran was collated by Zaid Ibn Thibit, but that other versions existed, collected by other persons (who were more highly recommended by Muhammad), but that Zaid's version was chosen, for no particular reason, by the caliphate at that time (Uthman) while the other versions were burnt. Now, while historians record a few substantial variations between different versions (such as the inclusion or exclusion of a surah or two) hadith traditions record literally *hundreds* of slight (seemingly insignificant) variations, such as slight variations in the forms of words, which do not affect the meaning of the passage. However, with regards to the mathematical miracle of the Quran, these, "slight" variations become highly significant, and would easily offset the entire argument. The bottom line is that the, "mathematical miracle" is probably a misguided mistake, based on the wrong data (the current version of the Quran). (I have written in more detail about the collation of the Quran, elsewhere.)

Second, something should surely be said about the completely arbitrary nature of the number 19. Any objective outsider is likely to chuckle when they read that 19 is the chosen, miraculous number. As far as numbers go, the number 19 is an amazingly *insignificant* number. Lucky number 7, for instance – traditionally the number of God's perfection – is written all over nature. Seven days of the week, seven colours in a rainbow, etc. Similarly, the number 3 has objective significance. Why would God choose the number 19, as the number to seal his revelation? Now, Muslims argue that 19 is significant for several reasons, and yet it is true that it has no objective significance to prove that it is *the creators* number. There is no rational explanation for the recurrence of the number 19, of all numbers.

This, in turn, feeds into the "top-of-the-pile" theory, mentioned earlier; that 19 is just the top number that the computer came up with. After all, we can surmise, for certain reasons, that the bigger a number is, after a certain point, the less occurrences of that number we will find. The number 1283 is never going to yield as many coincidences as the number 12 (which has a hundred or so multiples under 1283). In addition, just as a number cannot be too *big* it also cannot be too *small:* No one will be amazed at the amount of times the number 1 appears in the Quran! 2 is also too small to attract attention and 3 is clearly overdone, etc. Thus, 19 (a prime number) seems within the acceptable range to be just the number at the top of the pile: a number big enough to *seem* significant and small enough to *be* significant mathematically. We could have predicted the range that the top number would fall in, with relative certainty, before the mathematical investigation of the Quran ever started. Thus, we have added reason to be sceptical of the number 19.)

Third, when sifting through the vast amount of varied mathematical

miracle websites, you are bound to stumble upon two worrying trends: (1) there are frequent mentions of errors in counting and (2) there are frequent accusations (by Muslims) of errors in the Quranic text. Concerning (1), there have been several mistakes in the calculation of mathematical miracles. Researchers are often inconsistent in their methods and sometimes appear to leave out letters, words and surahs, for no apparent reason (other than making something add up to a multiple of nineteen). This does not seem to bother the researchers particularly. Muslim's acknowledge the mistakes in previous counts and that current counts are not infallible. Muslims also acknowledge that the counting of certain letters is being debated. With so much uncertainty and error, the mathematical miracle is low on credibility. (Many people might even have been led to believe this miracle because of counting errors!) Concerning (2), it appears, that since certain things do not add up to a multiple of 19, that there must be a mistake in the Quran, as we now know it. Thus, the very people who accuse the Gospels and Torah of being corrupted, will frequently say that their *own* revelation is corrupted, when it suites them. Thus, the person responsible for the Mathematical miracle, Dr. Rashad Khalifa (Ph.D.), has himself re-translated the Quran. This is not the first time that the Quran has been re-translated in order to yield some new miraculous feature: Maurice Bucaille. In his popular polemic, *The Bible, The Quran and Science,* decided to translate certain passages using scientific terminology, in order to yield the (so-called) scientific/medical miracle of the Quran. (Here, I have included points (1) and (2) together because a cynical mind would say they are connected: the sums don't add up (point 1), therefore, the Quran was tweaked to make the miracle work (point 2).)

One might well ask why the Muslim feels entitled to alter their holy book, in order to yield a mathematical miracle. The answer (as far as we can tell) is that the Muslim's conviction that there *is* (or *must be*) a mathematical miracle, is what justifies their *creating* the mathematical miracle. Thus, they notice certain potentially miraculous mathematical features (which are invalid for all the reasons we have mentioned in this essay) and this convinces them of the mathematical miracle. Thus, they do not see any harm in going the extra mile and "fixing" the Quran, in one way or another, in order to perfect the mathematical miracle. Thus, the mathematical miracle is the proverbial self-fulfilling prophecy. It also happens to be an excellent example of circular reasoning: the Muslim believes in the mathematical miracle, only because they have already decided it is true, not on the basis if the facts.

Forth, everyone researching this topic (whether Muslim or not) should be wary of (1) the sheer quantity of data available on the topic and

(2) the complex nature of the mathematical calculations. Concerning these things, I would point out merely that one of the more insidious forms of information warfare, is when many falsehoods, and half-truths, and full truths are mixed together to create one cohesive mess, which is incredibly difficult to extricate. The more facts mixed into the noxious cocktail, the more laborious it becomes to disprove. Added to this, the cocktail itself is far more titillating (to the average reader) than the lengthy, often technical disproof, which means that the cocktail is likely to gain wider circulation and popular acceptance. A recent example was Dan Brown's, *Da Vinci Code,* which was never intended as anything except fiction, yet it certainly created false impressions of history in the minds of millions of gullible people. (The same principle is exemplified in the phenomena of "email-bombs" (an outdated hacker's trick) which overwhelms the target with a huge number of emails, which are time-consuming to delete.) The mathematical miracle of the Quran is one such cocktail: a mixture of full truths, half truths and lies, and it is extremely difficult to refute due to the overwhelming mess of inconsistent, contradictory, haphazard facts, all of which seem to require complex, time consuming calculations (and specific versions of the Quran) to verify. Thus, the Mathematical miracle certainly fits the mould of the, "safety-in-numbers" fallacy.

Fifth, when reading these mathematical miracles, the reader will notice the lack of transparency and scholarship. Speaking only for myself, if I had discovered a mathematical miracle in the revelation I believed in: (1) I would devise one set of consistent methods used in discovering the miracle. (2) I would make sure that all my methods were recorded, if not in full, then at least in summary; I would state clearly how many calculations dead-ended and how many yielded multiples of 19. I would (3) explain clearly how certain findings *proved* divinity; for instance, I would show how the mathematical coincidences defied probability, and could not have been human inventions. (4) I would make sure that every person could easily pick up a Quran and verify the findings for themselves. (Certainly, many websites *claim* that you can do just that, however, the reality is more complex: it requires specific versions, software to verify the computers calculations, etc..) I would envisage a digital, searchable copy of the Quran with the numerical features somehow clearly delineated. However, the researchers of the miracle did not do any of these things. They merely state certain features, without making their methods clear, without proving the validity of their methods, without showing their precise calculations, etc.

Sixth, (following from the previous point) one might question the *mathematical* merits of finding the number 19 in the Quran. One might easily turn the mathematical miracle on its head, in mathematical terms. For

instance, finding multiple of 19 is all well and good, but the answer to the sum is not the only significant element. For instance, in "9234 / 486 = 19" what is the significance of 486? The Muslim person never considers this question or how it impacts the Quranic miracle. The divisor (in this case, 486) constitutes one *half* of all the calculations resulting in a multiple of 19 and it has absolutely no significance whatsoever. If God were responsible for the occurrence of 19 in the Quran, do you think that he would have left half the "miracle" with utterly no significance whatsoever? God might have ensured that all divisors followed patterns, but this is not the case here. Then there is the separate matter of the mathematically questionable methods used in the calculation of certain features. Muslims, for instance, sometimes "add" numbers together as follows (12 + 23 = 1223) of they break down numbers in a similar fashion (619 = 6 + 19). One would do well to question the mathematical validity of such mathematically absurd calculations. Was the miracle really authored by a God that cannot do maths? Then, again, *method* used to calculate the number 19 is also a crucial part of the equation. Thus, if a different method is used each time, we must ask, what is the significance of this method? If the method has no significance, then we have another dangling loose end to worry about. Thus, even if we grant the miracle is true (as Muslims present it) it still is more insignificant than not.

Seventh, I notice, when it comes to the mathematical miracle, that there is a complete lack of historical perspective. The average Muslim believes that the mathematical miracle is a unique feature of the Quran and that similar miracles do not exist anywhere else. However, what the reader should understand is that there are a certain number of *false* proofs, which appear to "prove" certain propositions, and which save people the time and effort of proving things properly (which is particularly convenient if you are trying to prove something which is unprovable/false). And, as it happens with short-cuts (not only the geographical kind) lazy people are inclined to take them, again and again. (Muslims have perfected the art of the to gimmicky, short-cut proof: I also think of the "produce a surah like it" challenge and the scientific/medical miracle.) Thus, the mathematical "proof" has made many appearances, to prove many different things, too countless to mention here. However, we might note that similar proofs have been used by religious oddballs to "prove" the Bible (Read, *The last twelve verses of Mark, their genuineness established*, by Ivan Panin). *The Bible Code* was a similar computer-generated oddity. (It was actually never intended as a *proof* of the Bible; more like an interesting curiosity.) The Kabbala also uses similar numerically-based proofs. The mathematical proof is not new or unique, it has been used, and will be used, again and again, by deluded people to convince themselves of false propositions. The

Muslim person is not choosing good company when he chooses to believe in the mathematical miracle of the Quran.

In summary and conclusion, numerical coincidences are plentiful wherever you look for them, given the abundance of countable items, and the numerous ways to manipulate data. Additionally, the argument for the mathematical miracle of the Quran lacks any and all consistency and perspective: it does use any consistent methods; it does not present the significance of *other* numbers, or the number of numerical dead ends, which would give us some perspective and allow us to estimate the true significance of 19. The hundreds of slight variations of the Quran would completely invalidate the miracle, and (on a different note) the number 19 has little or no objective significance and is probably just the number at the top of the heap. The miracle is packaged in such a voluminous, miasmatic cocktail, involving such convoluted counts and calculations, that it is practically impossible to verify, and to make matters worse, it is not presented in a transparent or scholarly way. Added to this, the miracle is not presented with any sort of historical perspective, regarding the use and misuse of mathematical, "proofs". Thus, the mathematical miracle of the Quran is dubious from whichever angle we choose to look at it. Overall, the mathematical miracle seems to be the desperate inconsistent search by pattern-hungry believers, which happened to find (with the help of some tweaking) a few sporadic mentions of an irrelevant number. This absurdity, in turn, reflects badly on the average Muslim who so readily accepts (based on insufficient evidence) what he does not understand and what makes no sense. (I have argued, elsewhere, that this general widespread insensitivity to logic is a strong indicator of a false religion.)

If we take a step back, we might question why God decided to use this specific type of mathematical miracle at all. Once we have asked this question, we soon realise that the current mathematical miracle is the least effective miracle imaginable. If God were the sort of being that felt the need to inscribe his revelation with "proofs", that he could have done a better job than inconsistently scattering the number 19 in his revelation. If God had wanted to prove his revelation (assuming that God is all-wise) he could have done better. I was hoping, for instance, that God might have hidden a coded message into his final revelation (e.g., "God wrote this,") or that God might have included the value of Pi to the thousandth decimal place or that he might have included the solution to Fermat's last theorem. A *human* might have invented a more miraculous miracle than the imbalanced inclusion of the number 19. A code, for instance, would have been a far greater mathematical miracle, for many reasons: (1) a code carries *information*, which is of undeniable significance, unlike the spasmodic

occurrence of a questionable number (2) a letter or two out of place in a code does not upset the whole code, unlike the mathematical miracle of the Quran, which is more delicate (at the same time, a *perfect* code will prove the *perfect* preservation of the Quran) (3) a code does not require a sporadic method each time to solve it, but one consistent method is used, unlike with the mathematical miracle. Thus, if you believe in a God who desires to prove his revelation, and a God who is able to do so, then the mathematical miracle of the Quran is *not* the argument for you.

Finally, we might take another step back and to consider why God, or Muslims, should have to resort to such desperate measures in the first place. There are many basic, simple tests of truth and reliability. What happened to the tried-and-tested tests of believability, such as checking the historical facts of the revelation, checking internal consistency? What about presenting the power of the ideas contained in the book? Is the poetical beauty of the Quran (the primary miracle) not convincing enough on its own? Is the character of Mohammed not attractive enough, or believable enough, as is? This mathematical miracle is an affront to all intelligent Muslims and a clear proof of the lack of critical thinking in the general Muslim populace. As long as such absurd, superstitious proofs abide, Islam will never be a credible religion. If fact, as long us such superstitious proofs abide Islam will always be an *incredible* religion. (Would God allow his true religion to be so completely overrun by falsehood?) Naturally, Muslim people will deny it, and it would take some effort to prove, however, it does seem that these elaborate, attention-grabbing proofs receive all the focus, because the basic arguments of Islam are weak and unappealing. Thus, these proofs act in the same way that a conjurer distracts the audience, in order to hide the truth, to create an illusion, and fool the audience.